



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,269	06/27/2002	Ruthie D. Lyle	RPS920020082US1	2687

25259 7590 01/16/2007
IBM CORPORATION
3039 CORNWALLIS RD.
DEPT. T81 / B503, PO BOX 12195
REASEARCH TRIANGLE PARK, NC 27709

EXAMINER

GHEBRETINSAE, TEMESGHEN

ART UNIT	PAPER NUMBER
----------	--------------

2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/064,269

Applicant(s)

LYLE ET AL.

Examiner

Temesghen Ghebretinsae

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

Art Unit: 2611

DETAILED ACTION

1. It would be of great assistance to the Office if all incoming papers pertaining to a filed application carried the following items:

1. Application number (checked for accuracy, including series code and serial no.).
2. Group art unit number (copied from most recent Office communication).
3. Filing date.
4. Name of the examiner who prepared the most recent Office action.
5. Title of invention.
6. Confirmation number (See MPEP § 503).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gan et al (7,027,418).

Consider claims 1-20. Gan discloses a wireless communications system providing for communication over two or more channels utilizing a communications architecture that calls for hopping from channel to channel during data transmission, the method comprising: scanning (selecting) the channels for interference and identifying channels experiencing interference and not experiencing interference and selecting channels not experiencing interference (the good channels) (see abstract, col.17, lines 11-34); transmitting normal data when hopping to a channel not identified as experiencing interference (on good channels); the scanning step is performed upon the

Art Unit: 2611

commencement of data communication as claimed in claim 2; the scanning step is performed upon each passage of first time period as claimed in claims 3,7; the scanning step is repeated periodically during data transmission as claimed in claims 4,13; the scanning step is performed when the data throughput rate falls below a predefined value as claimed in claims 5,14; the scanning step is performed when requested by the user as claimed in claims 6,15(see col.17, line 35 to lcol.18, line 67); the communication architecture is the standard known as IEEE 802.15.1 and Bluetooth a claimed in claims 9-11(see col.2, lines 27-35).

Gan differs from the claims invention in that he does not transmit only null data when hopping to a channel identified as experiencing interference (bad channels). The reasoning behind it is that to avoid the need to re-transmit packets or data, which are lost due to being transmitted on channels experiencing interference (bad channels). Thus, transmitting null data on channels experiencing interference (bad channels) is an obvious design choice (or functionally equivalent) to not transmitting on channels experiencing interference since on both concepts the data that have been transmitted on the channels that experience interference will be either lost or ignored. (See Gan col.3, lines 16-20)

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treister (us2002/0116460).

Treister discloses a wireless communications system providing for communication over two or more channels utilizing a communications architecture that calls for hopping from channel to channel during data transmission, the method

comprising: scanning (selecting) the channels for interference and identifying channels experiencing interference and not experiencing interference and selecting channels not experiencing interference (the good channels) (see abstract and paragraph {0119}); transmitting normal data when hopping to a channel not identified as experiencing interference (on good channels); the scanning step is performed upon the commencement of data communication as claimed in claim 2; the scanning step is performed upon each passage of first time period as claimed in claims 3,7; the scanning step is repeated periodically during data transmission as claimed in claims 4,13; the scanning step is performed when the data throughput rate falls below a predefined value as claimed in claims 5,14; the scanning step is performed when requested by the user as claimed in claims 6,15(see paragraph {0119,0131}); the communication architecture is the standard known as IEEE 802.15.1 and Bluetooth as claimed in claims 9-11(see paragraph 0010,0013).

Treister differs from the claims invention in that he does not transmit "only null" data when hopping to a channel identified as experiencing interference (bad channels). Treister avoids transmitting data on channels that have been identified as experiencing interference (bad channels). The reasoning behind it is that to avoid the need to re-transmit packets or data, which are lost due to being transmitted on channels experiencing interference (bad channels). Thus, transmitting null data on channels experiencing interference (bad channels) is an obvious design choice (or functionally equivalent) to not transmitting on channels experiencing interference since on both

concepts the data that have been transmitted on the channels that experience interference will be either lost or ignored. (See paragraph {0019})

Response to Arguments

5. Applicant's arguments filed 10/20/06 have been fully considered but they are not persuasive. Applicant argues that both Gan and Treister do not "transmit only null packets when hopping to a channel identified as experiencing interference". Examiner agrees with applicant argument and that is why the rejection is based on 103. The motivation/suggestion is described in detail in the office action above and (see Gan col.3, lines 16-20 and Treister paragraph {0019}).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temesghen Ghebretinsae whose telephone number is

Art Unit: 2611

571-272-3017. The examiner can normally be reached on Monday-Friday from 8 to 6.

The examiner can also be reached on alternate .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Temesghen Ghebretinsae
Primary Examiner
Art Unit 2611

T.Ghebretinsae.

1/5/07.

TEMESGHEN GHEBRETINSAE
PRIMARY EXAMINER
1/5/07